

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. Contract ID Code Firm-Fixed-Price		Page 1 Of 28	
2. Amendment/Modification No. P00001		3. Effective Date 2003DEC10		4. Requisition/Purchase Req No. SEE SCHEDULE		5. Project No. (If applicable)	
6. Issued By TACOM WARREN BLDG 231 AMSTA-AQ-ADBB PATRICIA ANN BIERI (586)574-8286 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: BIERIP@TACOM.ARMY.MIL		Code W56HZV		7. Administered By (If other than Item 6) DCMA CHICAGO 1523 WEST CENTRAL ROAD BLDG 203 ARLINGTON HEIGHTS IL 60004-2451		Code S1403A	
				SCD B PAS NONE ADP PT HQ0339			
8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) CATERPILLAR INC. DEFENSE & FEDERAL PRODUCTS 100 N E ADAMS PEORIA, IL. 61602-1324 TYPE BUSINESS: Large Business Performing in U.S.				<input type="checkbox"/>		9A. Amendment Of Solicitation No.	
				<input type="checkbox"/>		9B. Dated (See Item 11)	
				<input checked="" type="checkbox"/>		10A. Modification Of Contract/Order No. DAAE07-02-D-T012	
				<input type="checkbox"/>		10B. Dated (See Item 13) 2002MAR29	
Code 11083		Facility Code					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. Accounting And Appropriation Data (If required) NO CHANGE TO OBLIGATION DATA							
13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS							
KIND MOD CODE: 8 It Modifies The Contract/Order No. As Described In Item 14.							
<input type="checkbox"/>		A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A. The Changes Set Forth In Item 14 Are Made In					
<input type="checkbox"/>		B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b).					
<input type="checkbox"/>		C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of:					
<input checked="" type="checkbox"/>		D. Other (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return _____ copies to the Issuing Office.							
14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SEE SECOND PAGE FOR DESCRIPTION							
Contract Expiration Date: 2005JUL15							
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. Name And Title Of Signer (Type or print)				16A. Name And Title Of Contracting Officer (Type or print) M. J. FRANZEN FRANZENM@TACOM.ARMY.MIL (810)574-6304			
15B. Contractor/Offeror (Signature of person authorized to sign)		15C. Date Signed		16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)		16C. Date Signed 2003DEC10	
NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE				30-105-02		STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243	

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Name of Offeror or Contractor: CATERPILLAR INC.		

SECTION A - SUPPLEMENTAL INFORMATION

1. This Modification P00001 is a Bi-Lateral Supplemental Agreement.
2. The purpose of this Modification is to make the following changes:
 - a. Change "C.6.2.4.8 Training Analysis" to read:

"The contractor shall develop and deliver a training analysis in the contractor's format in accordance with ELIN A004."
 - b. Requirements for technical manuals are changed from two sets of manuals to one set and the Army's new two level maintenance philosophy is added.
 - i. Therefore, delete all the Scope of Work (SOW) for "Technical Publications" outlined from "C.6.2.3 through C.6.2.3.5.2."
 - ii. Replace with the updated SOW for "Technical Publications" re-established as "C.6.2.3 through C.6.2.3.5.2."
 - c. Change "C.6.3 Diagnostics" to read:

"The contractor shall submit documentation to the government showing the complete fault isolation capabilities of the analog diagnostic system. For the purpose of maintaining and troubleshooting via OEM Diagnostic Connector in accordance with Purchase Description paragraph 3.15.7, the contractor shall provide the manufacturer's recommended minimum and maximum parameters for all monitored components and how to interpret data outside the parameters. The contractor shall deliver the data in accordance with ELIN A014."
 - d. The descriptions for the following Exhibit Line Items (ELINs) (in Section B) are revised to incorporate scope of work references: A001, A004, A005, A006, A007, A008, A009, A014, A016 and A017.
 - e. Contract Data Requirements Lists (CDRLs) (listed in Section J) are revised to include the following changes. Since contract award, changes have been agreed to in various Government/Contractor meetings and need to be incorporated in the contract. The corrected versions are added to Exhibit A. The CDRLs are corrected/changed as follows:
 - i. A001: blocks 14 and 16.
 - ii. A004: blocks 5, 14, 15 and 16.
 - iii. A005: blocks 6, 14 and 16.
 - iv. A006: blocks 3, 14 and 16.
 - v. A007: block 16.
 - vi. A008: blocks 7, 14 and 16.
 - vii. A009: block 14 and 16.
 - viii. A010: blocks 1, 6 and 14.
 - ix. A012: blocks 5, 6, 14, 15 and 16.
 - x. A013: blocks 1, 14 and 16.
 - xi. A014: block 14.
 - xii. A015: blocks 2, 7 15 and 16.
 - xiii. A016: blocks 3, 5, 6, 14, 15 and 16.
 - xiv. A017: blocks 11, 15 and 16.
5. All other terms and conditions remain unchanged and in full force and effect.

*** END OF NARRATIVE A 005 ***

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS				
0061	<u>FIRST ORDERING PERIOD - DATA</u> SECURITY CLASS: Unclassified				
A001	<u>LMI SUMMARY</u> NOUN: MAINTENANCE ANALYSIS SECURITY CLASS: Unclassified MAINTENANCE ANALYSIS IN ACCORDANCE WITH CDRL A001 AND CLAUSE C.6.2.1 (End of narrative B001) <u>Packaging and Marking</u> <u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination Delivery is in accordance with CDRL A001 (End of narrative F001)	1	LO	\$ <u>169,860.00000</u>	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A004	<p><u>INSTRUCTIONAL PERFORMANCE REQUIREMENT DOC</u></p> <p>NOUN: TRAINING ANALYSIS SECURITY CLASS: Unclassified</p> <p>TRAINING ANALYSIS IN ACCORDANCE WITH CDRL A004 AND CLAUSE C.6.2.4.8</p> <p>(End of narrative B001)</p> <p><u>Packaging and Marking</u></p> <p><u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination</p>	1	LO	\$ 27,141.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A005	<div>COMMERCIAL TECHNICAL MANUALS W/SUPPLEMENTAL</div> <div>NOUN: TECHNICAL MANUALS SECURITY CLASS: Unclassified</div> <div>COMMERCIAL TECHNICAL MANUALS WITH SUPPLEMENTARY DATA IN ACCORDANCE WITH CDRL A005 AND CLAUSE C.6.2.3</div> <div>(End of narrative B001)</div> <div>Packaging and Marking</div> <div>Inspection and Acceptance INSPECTION: DestinationACCEPTANCE: Destination</div>	1	LO	\$ 1,068,929.000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A006	<p><u>ELECTRONIC TECHNICAL MANUALS</u></p> <p>NOUN: ELECTRONIC TECHNICAL MANUALS SECURITY CLASS: Unclassified</p> <p>ELECTRONIC TECHNICAL MANUALS IN ACCORDANCE WITH CDRL A006 AND CLAUSE C.6.2.3</p> <p>(End of narrative B001)</p> <p><u>Packaging and Marking</u></p> <p><u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination</p>	1	LO	\$ 7,507.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A007	<p><u>STUDENT ATTENDANCE REPORT</u></p> <p>NOUN: STUDENT ATTENDANCE REPORT SECURITY CLASS: Unclassified</p> <p>STUDENT ATTENDANCE REPORTS IN ACCORDANCE WITH CDRL A007 AND CLAUSE C.6.2.4</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination</p>	1	LO	\$ ** NSP **	\$ ** NSP **

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A008	<p><u>TRAINING MATERIALS</u></p> <p>NOUN: TRAINING MATERIALS SECURITY CLASS: Unclassified</p> <p>TRAINING MATERIALS IN ACCORDANCE WITH CDRL A008 AND CLAUSE C.6.2.4</p> <p>(End of narrative B001)</p> <p><u>Packaging and Marking</u></p> <p><u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination</p>	1	LO	\$ <u>206,649.00000</u>	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A009	<p><u>TRAINING COURSE OUTLINE</u></p> <p>NOUN: TRAINING COURSE OUTLINE SECURITY CLASS: Unclassified</p> <p>TRAINING COURSE OUTLINES IN ACCORDANCE WITH CDRL A009 AND CLAUSE C.6.2.4</p> <p>(End of narrative B001)</p> <p><u>Packaging and Marking</u></p> <p><u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination</p>	1	LO	\$ 17,377.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A010	<p><u>TRANSPORTABILITY REPORT</u></p> <p>NOUN: TRANSPORTABILITY REPORT SECURITY CLASS: Unclassified</p> <p>TRANSPORTABILITY REPORT IN ACCORDANCE WITH CDRL A010 AND CLAUSE C.8</p> <p>(End of narrative B001)</p> <p><u>Packaging and Marking</u></p> <p><u>Inspection and Acceptance</u> INSPECTION: DestinationACCEPTANCE: Destination</p>	1	LO	\$ 79,401.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A012	<div>CONTRACT FIELD SERVICE REPORT</div> <div>NOUN: CONTRACT FIELD SERVICE REPORT SECURITY CLASS: Unclassified</div> <div>CONTRACT FIELD SERVICE REPORT IN ACCORDANCE WITH CDRL A012 AND CLAUSE C.10</div> <div>(End of narrative B001)</div> <div>Inspection and Acceptance INSPECTION: DestinationACCEPTANCE: Destination</div>	1	LO	\$ ** NSP **	\$ ** NSP **

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A013	<div>LMI SUMMARY</div> <div>NOUN: NMWR DATA SUMMARY SECURITY CLASS: Unclassified</div> <div>NMWR DATA SUMMARY IN ACCORDANCE WITH CDRL A013 AND CLAUSE C.6.2.1.4</div> <div>(End of narrative B001)</div> <div>Packaging and Marking</div> <div>Inspection and Acceptance INSPECTION: DestinationACCEPTANCE: Destination</div>	1	LO	\$ 42,219.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A015	<div>CORRECTIVE ACTION REPORT</div> <div>NOUN: FACAR</div> <div>SECURITY CLASS: Unclassified</div> <div>FAILURE ANALYSIS CORRECTIVE ACTION REPORT IN ACCORDANCE WITH CDRL A015 AND E.7</div> <div>(End of narrative B001)</div> <div>Packaging and Marking</div> <div>Inspection and Acceptance</div> <div>INSPECTION: DestinationACCEPTANCE: Destination</div>	1	LO	\$ 21,721.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A016	<p><u>TECHNICAL MANUAL RPSTL</u></p> <p>NOUN: RPSTL SECURITY CLASS: Unclassified</p> <p>TECHNICAL MANUAL REPAIR PARTS & SPECIAL TOOLS LIST (RPSTL) IN ACCORDANCE WITH CDRL A016 AND C.6.2.3</p> <p>(End of narrative B001)</p> <p><u>Packaging and Marking</u></p>	1	LO	\$ 428,311.00000	

Name of Offeror or Contractor: CATERPILLAR INC.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A017	<div>NMWRSNOUN: NMWRSSecurity Class: Unclassified</div> <div>NMWR(S) in accordance with CDRL A017 and C.6.2.3.4</div> <div>(End of narrative B001)</div> <div>Packaging and Marking</div> <div>Inspection and Acceptance</div> <div>Inspection: DestinationACCEPTANCE: Destination</div>	1	LO	\$ UNDEFINITIZED	

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SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1. Hardware Deliveries

C.1.1 Airborne Scraper and Water Distributor System. (ASWDS).

The contractor shall manufacture and deliver the ASWDS in accordance with all of the technical requirements of Purchase Description ATPD-2310, dated 7 Feb 02. Delivery Orders will specify the quantities, delivery dates, destinations, and type of vehicle. Section E of this contract and Section 4 of the PD specify the First Article Test requirements. Section B of each delivery order will specify the color of the top coat of paint.

C.1.2 Initial Service Package.

The contractor shall provide an Initial Service Package with each vehicle at hand-off to perform the first scheduled maintenance. The contractor shall mark each item with the nomenclature and part number to ensure the correct application. The Initial Service Package consists of the following parts:

Item	Part Number	Quantity
Engine Oil Filter	1R0739	4
Fuel Filter	1R0751	4
Transmission Filter	1R0719	1
Hydraulic Filter	4J6064	2
Primary Air Filter	6I2503	1
Secondary Air Filter	6I2504	1
Fuel Element	1174089	2
V-Belt Set	4W8729	1
V-Belt	366775	1

C.2 Data Deliveries

The contractor shall deliver all data in English, in accordance with the DD Forms 1423. The contractor shall deliver all data electronically via diskette or electronic mail in MS Office Suite and Windows compatible format, unless otherwise specified in the contract. The government will provide electronic mail addresses during the Start of Work Meeting. Exhibit A contains all data requirements for the Water Distributor Type II and the Scraper Type IV

C.3 Meetings and Reviews

C.3.1 Administration.

The contractor and government will periodically have meetings and reviews during this contract's performance period, as outlined in C.3.2 below. The objectives of these meetings are to review progress, provide guidance on technical, logistics, contractual or other issues that come up during performance, as required. When meetings are at the contractor's facility, the contractor will make these things available for the government's use as necessary: production or other required versions of the ASWDS needed for viewing; required technical, logistics or other documentation (including drawings, computer data bases, publications, and other required data); computer resources and administrative support, as needed.

C.3.2 Meetings.

a. Start-of-Work Meeting. Within 30 days of initial delivery order award, we will hold a Start of Work meeting at TACOM. This meeting will last one day. The meetings will focus on contract terms and conditions, a review of all data requirements, required specifications, schedule, test requirements and relevant logistics requirements. A Logistics sub-meeting will be part of the start-of-work meeting, to include:

1. Maintenance Planning, to review and discuss operator and maintenance functions, the maintenance concept for the system, and diagnostics requirements.
2. Provisioning guidance, to provide guidance to the contractor for documenting and submitting provisioning data.
3. Publications Meeting, to review and discuss publication requirements
4. New Equipment Training Meeting, to review and discuss the training requirements.
5. Commercial Logistics Support Meeting, to review and discuss the commercial logistic support structure.

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- 6. Logistic Testing and test support requirements.
- 7. Other Integrated Logistics Support (ILS) issues.
- 8. The government and the contractor shall jointly develop an ILS schedule.

b. Pre-First Article Test Meeting, to review and discuss testing, support, and training. This meeting shall be held 60 days prior to government FAT at Aberdeen Proving Ground, MD, and shall last one day.

c. Program Status Reviews.

We will conduct Program Status Reviews (PSRs) approximately every 90 days or as-needed (minimum of 3), starting 90 days after the start of work. The meetings will cover the contractor's production status, data deliverable status, and progress on all logistics requirements. Supportability Integrated Product Team (SIPT) meetings will be part of the PSRs. We will hold the reviews at US Army Tank-automotive and Armaments Command, Warren MI, and they will last up to two days. The government and contractor will jointly schedule the meetings and establish the agenda.

C.4 Configuration Management.

The contractor shall be responsible for maintaining configuration control of the ASWDS. The contractor shall establish a production configuration baseline for each vehicle type after completion of both the contractor's and the government's portions of the First Article Test (FAT). This baseline will identify and document the functional and physical characteristics of the ASWDS. It is the government's intent to standardize the vehicle configuration. The government acknowledges that the contractor may want to offer to the government configuration changes being introduced to its commercial production during the term of this contract. However, it's important for the government to assess the impact of any proposed vehicle changes to the logistics and technical requirements established for this program. The government reserves the right to disapprove proposed changes that would adversely affect the program. The contractor shall notify the government prior to production of any impending federal laws and regulations scheduled to go into effect during the life of this contract that may impact configuration, i.e. EPA emissions requirements.

C.4.1 Engineering Changes - Contractor Requested

C.4.1.1 Requirement for Submittal.

The contractor shall submit a request for change for any configuration change, which impacts form, fit or function as defined in C.4.3. The contractor shall submit requests for approval of changes to the configuration baseline to the Contracting Officer at least 60 days before the proposed application date. The request for change shall include the following:

- a. Rationale to support the necessity of making the change;
- b. Any test results, planned testing, or other information to show acceptability;
- c. Identification of the affected parts and assemblies, drawings, sketches, calculations, and other data necessary to define the changes proposed;
- d. Identification of any logistics impact to include changes to manuals, maintenance procedures, repair parts, special tools and test equipment, packaging, and transportation;
- e. any proposed decrease in contract price.
- f. Identification, by serial number, of the systems affected

C.4.1.2 Government Review.

The government may require the contractor to perform additional tests to verify acceptability of any proposed change. The government will determine the extent of testing up to and including a complete First Article Test (FAT). The contractor will perform the tests at no additional cost to the government. The government will acknowledge proposed changes and provide notification within 30 days of receiving the acceptable request if the government's evaluation shows the proposed change would have an adverse affect on performance, reliability, availability, maintainability, or repair. The government has the right to an equitable downward adjustment for any requested change implemented.

C.4.1.3 Responsibility for Failure Due to Changes.

The government's acknowledgement of the contractor's change does not relieve the contractor from its responsibility to furnish all items in conformance with the contract performance requirements. Responsibility for cost of changes is as follows:

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Name of Offeror or Contractor: CATERPILLAR INC.

- a. The government is not responsible for additional testing or software costs associated with any changes the contractor submits.
- b. When a change results in reduced contractor costs, the government may obtain an equitable reduction in contract price.
- c. The government is not liable for any costs the contractor may incur, due to delay in contract performance, as a result of any of the contractor's requests for change.

C.4.1.4 Within 45 days of making the change, the contractor shall submit, at no cost to the government, revisions to all affected contractual data deliverables, whether they affect form, fit, or function or not.

C.4.1.5 For reporting requirements on configuration changes, the contractor shall comply with C.13.

C.4.2 Engineering Changes - Government Directed.

If the government wants to change the configuration, the Contracting Officer will request a technical and price proposal. The contractor shall furnish the proposal within 60 days of receipt of request at no cost. The contractor's proposal shall include an Integrated Logistics Support impact statement, with the impact of each ILS element.

C.4.3 Definitions. The following are definitions for form, fit, and function:

C.4.3.1 Function:

The item operates exactly as the item it replaces, with no functional difference between the old, replaced item and the new, replacing item. When appropriate, the replacing item shall be inspected, replaced, repaired and/or otherwise maintained in exactly the same method as the item it replaces.

C.4.3.2 Fit:

The item goes onto, into or attached to the equipment exactly as the item it replaces. There is no difference in mounting, interface or operation between replaced and replacing parts. There is an exact fit match.

C.4.3.3 Form:

It possesses the same internal and external characteristics as the item it replaces (interchangeable). It fits and functions the same as the item it replaces (interchangeable, substitutable). It may include components that are of different materials than the replaced components, but do not affect fit or function (interchangeable, substitutable). The replacement, repair, service or maintenance of the item is exactly the same as the item it replaces (substitutable).

C.5 Vehicle Hand-Off.

The contractor will be responsible to hand off all equipment deliverable under this contract to each gaining unit. The contractor's local dealer will perform the hand off and administer the vehicle warranty. The contractor shall deliver all the vehicles ready to operate prior to New Equipment Training. The effort includes:

- a. Re-assembly of the vehicle to a fully operational configuration if the vehicle is shipped with any components removed. All tools and equipment required to complete the re-assembly will be the contractor's responsibility.
- b. Inventory of any material delivered with the vehicle, e.g., technical publications, initial service kits, and sectionalization kits.
- c. De-process each vehicle (includes all the activities to assure vehicle is in operating order).
- d. Provide one-hour familiarization to 6 - 8 people from the receiving unit on first machine delivered so they can safely move the vehicle until full training is conducted. Familiarization includes operator set-up, operating and shut down procedures, safe operations, and daily and weekly service locations and checks.
- e. Activation of the warranty, which includes: stamping the effective date (date of delivery to the gaining unit) on the vehicle warranty data plate, discussing with the unit the terms and details of warranty administration. The contractor shall explain the emission warranty and vehicle warranty, provided in the technical manuals, to the gaining unit. The contractor shall also notify the Contracting Officer in writing or by email of the warranty implementation date by serial number, shipping destination, and DODAAC once the vehicle is handed off.
- f. Allow time for the receiving unit to inventory the materials delivered with the vehicle.

C.6 Logistics

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C.6.1 Logistics Management. The contractor shall present an overview of its plan to manage and develop logistics products and services at the start of work meeting. The contractor shall participate in (co-chair) government scheduled Supportability Integrated Product Team (SIPT) meetings as part of the PSR. (See C.3.)

C.6.2 ILS Development. The contractor shall use MIL-PRF-49506, for use in identifying content, format, delivery and related guidance for logistics data. See Exhibits B, E, and F for further guidance.

C.6.2.1 Maintenance Planning.

C.6.2.1.1 Maintenance Analysis. The contractor shall conduct an analysis to determine the maintainability characteristics of the system. The analysis shall be documented in the contractors format as an Logistics Management Information (LMI) summary entitled "Maintenance Analysis," and will identify the maintenance functions, level of maintenance, manpower, spare parts and support equipment required for each repairable item. The analysis will be in end item hardware breakdown sequence, and will also identify Functional Group Codes (FGC) for each repairable item. Instructions are contained in Exhibit B, Maintenance Analysis. The LMI summary shall be delivered in accordance with CRDL A001.

C.6.2.1.2 The Army Oil Analysis Program (AOAP). The contractor shall furnish oil analysis data for the engine, transmission, and hydraulic system consisting of the information identified on AMC Form 2889-R-E, dated Jan 95, AOAP Candidate Enrollment Nomination Sheet, Exhibit C. Information shall consist of wear metal guidelines in parts per million, identification of normal and abnormal wear levels in parts per million, acceptable break-in wear metal levels and length of time required for an acceptable break-in of the item.

C.6.2.1.3 The Army Maintenance Management System (TAMMS). The contractor shall prepare a DA Form 2408-9, Equipment Control Records (Government furnished form) for each vehicle it delivers as an Acceptance and Registration Report. The contractor shall prepare the form in accordance with the sample DA Form 2408-9 (Exhibit D - blank form). The contractor shall have the DCMC QAR complete blocks 22 and 23 as part of the government's final inspection. After the DCMC QAR complete block 22 and 23, the contractor shall distribute the DA Form 2408-9 as follows:

- a. Place Log Book copy (copy #1) in a waterproof case, secured in the operator station, and shipped with each vehicle.
- b. Submit the control copy (copy #2) within five (5) working days to:

Director
LOGSA
ATTN: AMXLS-RRS
Redstone Arsenal, AL 35898-7466

- c. Submit National Maintenance Point (NMP) copy (copy#3) within working five days to:

Commander
U.S. Army Tank-automotive and Armaments Command
ATTN: AMSTA-IM-CJC
6501 E. 11 Mile Rd.
Warren, MI 48397-5000

C.6.2.1.4 National Maintenance Work Requirement (NMWR). The government may want to procure NMWRs for components that are repairable at the General Support (GS) level or above. To aid in this determination, the contractor shall develop a NMWR candidate list and develop an LMI Summary called NMWR Data Summary for those components remaining on the candidate list after review by the government.

C.6.2.1.4.1 NMWR Candidate List. The contractor shall deliver a NMWR candidate list consisting of all parts coded for repair at the GS level or above, in accordance with ELIN A013. The source data for this list will be the Maintenance Analysis, performed per paragraph C.6.2.1.1. The contractor may remove components costing less than \$500. The government will review, make changes as necessary and provide the approved NMWR candidate list to the contractor.

C.6.2.1.4.2 NMWR Data Summary. The contractor shall perform a data summary for components on the government approved NMWR candidate list. The summary may be in the contractors format, and shall be documented in accordance with Exhibit E. The NMWR Data summary shall be delivered in accordance with ELIN A013.

C.6.2.1.4.3 NMWR Final List. The Government will use the data summary to compare the cost to buy new vs. the cost to rebuild, establish inventory levels, and determine how often this item will need to be repaired. The Government will review this data and finalize the NMWR Candidate listing to identify which items are to have NMWRs developed.

C.6.2.2 Provisioning.

The Contractor shall provide LMI Data Products and LMI Summaries for parts on each vehicle to be provisioned. Incremental submission of

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provisioning data is authorized. Each incremental submission shall have no more than 1500 lines per submission. The contractor shall include at least one major assembly in each increment, until all major assemblies have been provisioned. A part number change will be submitted when parts used on the latest configuration of each system have part numbers other than as listed in the equipment's current Provisioning Master Record (PMR). Submittals for a part number change shall include any associated assembly, subassembly or component down parts part number changes when applicable. Provisioning updates shall continue until 30 days after approval of the First Article Test vehicles, at which time provisioning deliveries will be complete. This will also serve as the configuration baseline for the manuals. All LMI provisioning data shall be prepared in accordance with DI-ALSS-81529, and the PMR Data Requirements (Exhibit F).

C.6.2.2.1 Provisioning Data Products (Illustrations): Provisioning illustrations shall consist of illustrations such as company drawings or commercial parts book pages that clearly identify each new item and its part number. Illustrations shall be annotated with the affected Provisioning Line Item Sequence Number (PLISN) and Provisioning Contract Control Number (PCCN) for the system. The contractor shall furnish an illustration, either hard copy or electronic that is legible and representative, for each new or changed part number in accordance with CDRL A002.

C.6.2.2.2 Provisioning Master Record (PMR): The contractor shall use the on-line feature to create and update the PMR for each system. The government will provide passwords and instruction for use of this feature. Contractor submissions shall be made once a month until each system is complete. The data will go into a suspense file, to be executed by the government. The data will not be considered accepted until it has passed all manual and computer edits for the system, and the active PMR has been successfully updated. The contractor shall notify the government within 24 hours of each PMR update and provide a list of PLISNs submitted, sorted by PCCN, via email to the government representative specified. Within 7 days of each PMR update, the contractor shall submit a Cross Reference List of old part number to new part number to the government via email. All provisioning documentation, called LMI Data Products, shall be delivered in accordance with CDRL A003.

(C.6.2.3 THROUGH C.6.2.3.5.2 DELETED AND REPLACED BY MODIFICATION P00001)

C.6.2.3 Technical Publications - Commercial Manuals with Supplemental Data, Department Of The Army Repair Parts and Special Tools List (DARPSTL), National Maintenance Work Requirements (NMWRs), And Electronic Technical Manuals (ETMs).

C.6.2.3.1. The Contractor shall provide Commercial Off-The-Shelf (COTS) manual(s) with supplemental data to support the Airborne/Air Assault Scraper and Water Distributor in accordance with publications Exhibit G and the related DD Forms 1423. The contractor shall tailor the commercial manuals to reflect each system being procured. The government will download the RPSTL narrative data from the contractor updated PMR. The contractor shall deliver a DA Repair Parts and Special Tools List (RPSTL) in accordance with RPSTL Exhibit H and the related DD Forms 1423. The technical manuals shall reflect the Armys new two level maintenance philosophy.

C.6.2.3.2 Technical Manuals. The contractor shall develop the following Operator, Maintenance and RPSTL manuals that will cover both Airborne/Air Assault Configurations.

613C Scraper and Water Distributor

TM5-3800-205-10-1	Operators Manual Scraper
TM5-3800-205-10-2	Operators Manual Water Distributor
TM5-3800-205-23-1	Field Maintenance Manual (Common Maintenance)
TM5-3800-205-23-2	Field Maintenance Manual (Scraper)
TM5-3800-205-23-3	Field Maintenance Manual (Water Distributor)
TM5-3800-205-23P	Field Maintenance Repair Parts and Special Tools List (both systems)

Maintenance and RPSTL manuals shall be divided into volumes if the page count for one manual exceeds 1500 pages (750 sheets). TACOM will provide the complete TM number for each manual.

C.6.2.3.2.1 Supplemental Data.

The contractor shall prepare and deliver Supplemental Data for the ASWDS, using Exhibits G, and H and related DD Form 1423. The Supplemental Data shall include:

- a. Operator and Unit level Preventive Maintenance, Checks, and Services (PMCS) with lubrication instructions incorporated
- b. Maintenance Allocation Chart (MAC)
- c. Basic Issue Items (BII)

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- d. Additional Authorized List (AAL)
- e. Component of End Items List (COEI)
- f. Repair procedures for components coded repairable in the Maintenance Analysis (C.6.2.1.1)
- g. References
- h. Special Tool List
- i. Parts Cross Reference List
- j. Army covers for the commercial manuals
- k. DA Forms 2028-2

l. If the ASWDS noise level exceeds 85 dB(A), the contractor shall develop warnings related to noise hazard and hearing protection and the contractor shall include a noise profile. The noise profile identifies distance around the vehicle in which 85 dB (A) is exceeded.

m. Transportability Data for disassembly and assembly for all vehicles required to meet all transport modes called out in the contract shall be added to the operators manual. If this data is not part of the contractor's existing commercial manual, it is considered supplementation and must be validated. This data may be added as an appendix to the manual if not a part of your existing manuals. The contractor shall include a reference identifying the location of tools and equipment required for preparation of transport.

n. Any and all information required to reflect and support the military unique requirements to meet ATPD-2310 such as, but not limited to slave receptacle, rifle storage bracket and decontamination apparatus, portable (DAP), and the use of JP-8 fuel.

- o. A list of components that are susceptible to damage from the biological/chemical decontaminant DS2.
- p. Reference to decontamination procedures. (Field Manual (FM) 3-5, entitled "NBC Decontamination.")
- q. List of components susceptible to High-altitude Electromagnetic Pulse (HEMP.)
- r. Long term and short term storage requirements, any exercise of equipment needed to prevent deterioration.

C.6.2.3.2.2 Military Unique Items.

The contractor shall integrate all military unique items into the appropriate sections of the commercial manuals.

C.6.2.3.3 Validation/Verification (Val/Ver).

The contractor and the government shall perform a combined 100% val/ver of supplemental data to ensure accuracy, compatibility and completeness. The contractor shall ensure that the commercial manual(s) data accurately reflects and supports only the Scraper and Water Distributor configurations procured under this contract, including any and all changes to the configurations resulting from testing, vendor parts supply and production line changes. The government will review the draft manuals to determine if the manuals are complete enough to go to validation/verification or be returned for corrections. The contractor shall deliver a Validation/Verification Plan, in its own format, informing the government of its planned validation/verification schedule, start date, time, and location in accordance with ELIN A005. The contractor shall support the validation/verification with parts, special tools and any test equipment as called out in the Publications Exhibits G and H. The contractor shall also support the val/ver by having at least one person in attendance who was involved in the development of the supplemental data. This person will take notes of all corrections required and be able to answer questions about the manual(s) development.

C.6.2.3.4 NMWRS.

The government may want to procure NMWRS for components that are repairable at the sustainment maintenance level. The price for any NMWRS the government wants after its analysis will be separately negotiated. The Contractor will provide inspection procedures, overhaul inspection procedures, mandatory replacement parts list, and any refurbishing instructions for all items on the final NMWR Candidate List. The Contractor will provide a list of maintenance procedures either published in an Army TM or new maintenance procedures not yet published. The maintenance procedures will also include information on replacing or upgrading testing/diagnostic sensors, final testing procedures and packing and preservation procedures. The new maintenance procedures will be included in the NMWR.

C.6.2.3.4.1 The contractor will provide the technical rebuild standards, inspections, machining standards, and testing procedures that are required to write NMWRS from this analysis. The contractor shall also develop pre-shop analysis for sub-components, if required.

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C.6.2.3.4.2 The data developed from the analysis of each NMWR component candidate shall be used as source data for each NMWR. The Contractor shall provide a NMWR for each component on the final candidate list IAW paragraph C.6.2.1.4.2 ELIN A013.

C.6.2.3.4.3 National Maintenance Point rebuild standards will be numbered IAW AMC Supplement 1 to AR 25-30, dated 15 July 1993, Subject: The Army Integrated Publishing and Printing Program, paragraph 2-77I(1). NMWRs will use the "N" prefix in lieu of the "D" prefix for Depot Maintenance Work Requirements (DMWRs).

C.6.2.3.4.4 The Government reserves the right to combine all selected components into one NMWR for this vehicle series. The price(s) for the NMWRs will be negotiated when the government determines the number of NMWR manuals to be developed.

C.6.2.3.5 Electronic Technical Manuals (ETMs)(Adobe Acrobat .pdf). The contractor shall prepare and deliver ETMs and electronic files for each technical publication delivered under this contract in accordance with Exhibits G and H, and related DD Form 1423s.

C.6.2.3.5.1 The contractor shall furnish unrestricted copyright releases for all commercial manuals and supplemental data. The contractor shall ensure that the government has the right to use and distribute the ETMs and electronic data files delivered under this contract.

C.6.2.3.5.2 The contractor shall correct all errors found in the manuals, ETMs, and electronic data files resulting from contractor and government reviews, tests or val/ver at no additional cost to the government.

C.6.2.4 New Equipment Training (NET)

C.6.2.4.1 Tester Training

a. The contractor shall provide training for the Government and its support personnel prior to testing the variants of the ASWDS. The training and materials used shall be a baseline for development of the Instructor & Key Personnel (I&KPT) and New Equipment Training (NET). The contractor shall provide the materials and equipment needed to support training (training materials, special tools, components, training aides, and repair parts).

b. The tester training shall be no more than 64 hours in length for the ASWDS. The government will limit classes to a maximum of 14 students. The contractor shall maximize the use of available commercial training materials with supplementation, using commercial formats.

c. The course shall be designed to ensure test personnel have been sufficiently trained to properly operate and maintain the ASWDS. Training shall include proper operating procedures, equipment and instrument familiarization, safety precautions, operator and maintainer Preventive Maintenance Checks and Services (PMCS), maintenance tasks, and all necessary materials and equipment required supporting testing of all configuration variants of the ASWDS.

d. The contractor shall conduct the training at the government's testing facility, Aberdeen Test Center, MD. The government will establish training dates. The training will be held no earlier than 30 days prior to the beginning of testing.

C.6.2.4.2 Instructor and Key Personnel (I&KP)

a. The contractor shall provide equipment, facilities, instructions, instructor(s), tools (special and common), any replacement parts damaged during training, and a technical training course for government personnel and its support contractors covering separate Operation and Maintainers courses for each configuration of the water distributors and scrapers. The training will be held no earlier than 60 days prior to the first fielding.

b. Structure of the training courses:

(1) The contractor shall provide two complete training programs of instruction (POI), an Operation and Operator Maintenance course, and a Unit, Direct, and General Support Maintenance course.

(2) Instructor and Key Personnel Training (I&KPT) class will have a maximum of 12 students.

(3) The Operator class shall be no more than 64 hours in length, and the Maintainer class no more than 40 hours in length for the ASWDS, starting at 0800 hours each day, at the contractor's facility.

(4) The government will establish training dates and student allocations.

(5) The training shall be structured to provide at least 70% "hands-on" exercise.

(6) The contractor shall provide training covering proper operating procedures, operator and maintainer preventive maintenance checks and services (PMCS), proper safety procedures, maintenance tasks, and all necessary materials and equipment required to support

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training of all configuration variants of the ASWDS.

(7) The government will provide sample training materials and outlines at the Start of Work (SOW) meeting.

C.6.2.4.3 NET Operator Training.

The contractor shall conduct NET training for operators of the vehicles (MOS 62E/J) as outlined in C.6.2.4.2 above, except at various government locations. The dates and locations will be as specified in individual delivery orders. The contractor shall also submit the Student Attendance Report, critiques, and training certificates as outlined below in C.6.2.4.6.2. Travel costs associated with this training will be negotiated prior to the issuance of the delivery order.

C.6.2.4.4 NET Maintainer Training.

The contractor shall conduct NET training for vehicle maintainers (MOS 62B/N/919A) as outlined in C.6.2.4.2 above, except at various government locations. The dates and locations will be as specified in individual delivery orders. The contractor shall also provide any replacement parts damaged during training, submit the Student Attendance Report, critiques, and training certificates as outlined below in C.6.2.4.6.2. Travel costs associated with this training will be negotiated prior to the issuance of the delivery order.

C.6.2.4.5 Advanced Operator Training. The contractor shall conduct advanced operational techniques for the ASWDS at various government locations. The training shall be no longer than 40 hours. The dates and locations will be specified in individual delivery orders. The contractor shall submit the student attendance report, critique, and training certificates as outlined below in C.6.2.4.6.2.

C.6.2.4.6 Development of Training Materials for I&KP and NET

C.6.2.4.6.1 Training Course Control Document (Course Outline)

a. The contractor shall provide a training course outline listing all materials and training aids used to conduct the course in accordance with ELIN A009.

b. The outlines are a schedule of events and shall include a breakdown of individual topics showing the time allotted, materials needed (TV, VCR, etc.), facility requirements (pit, shop bay, etc.), equipment needed (lift, crane, tools, etc.), reference materials, (TMs, bulletins, etc.), and the type of instruction (practical exercise, lecture, demonstration).

C.6.2.4.6.2 Training Materials

a. The contractor shall use commercial training materials with supplementation to reflect the production configurations of the vehicles and develop training materials in modules using TRADOC Automated Systems Approach to Training (ASAT) software. The ASAT software will be provided to the contractor at the start of work meeting. The contractor shall prepare and deliver the following materials in accordance with ELIN A008:

- (1) Water Distributor/Scraper Operators Instructor Guide
 - Student Lesson Guide
 - Student Handout
- (2) Water Distributor/Scraper Maintainers Instructor Guide
 - Student Lesson Guide
 - Student Handout

b. Training materials may consist of, but are not limited to; in-house training materials, training literature, operation and maintenance manuals, contractors handbooks, pamphlets, utility manuals, software manuals, logic diagrams, schematics, flow block diagrams, equipment description and functional data, testing procedures, visual aids, and other documents suitable for use in development and conduct of training programs.

c. Visual aids may consist of, but are not limited to; videos, slides, transparencies, wall charts, schematics, illustrations, pictures, drawings, components, and cutaways.

d. The contractor shall provide each student one reproducible hardcopy of all materials used during training.

e. The contractor shall deliver the final approved training material in an editable digital format, on floppy or compact disks, IBM compatible, Windows based, developed using Microsoft Word. Graphics shall be in PowerPoint, JPG, TIFF, GIF, or SGML formats.

f. Student Attendance Report

(1) Upon completion of each class the contractor shall provide the government a student roster in accordance with ELIN A007. The roster shall include the name of the class, start and end date, instructor(s) name and signature, location of the class, student

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name, social security number (if military), homestation address, record of daily attendance for each student, and instructors notes

(2) At the end of class, each student shall complete a class critique. The government will provide critique sheets and the contractor shall administer them. The contractor shall submit the critiques to the government along with the student roster.

(3) At the end of the class, the contractor shall present each student with a Certificate of Training. The government will provide certificates, however the contractor may also administer a corporate certificate.

C.6.2.4.7 Distance Learning Package (DLP). The contractor shall develop interactive compact disk read only memory (CDROM) productions for the ASWDS. The productions must be personal computer (PC) based and able to be used with IBM Windows operating systems and commercial software.

a. The CD-ROM interactive operator training package will include the topics listed:

- General end item description
- Location and description of components
- Start up
- Proper operation (day and night operation, convoy operation, sectionalizing and preparation for transport)
- Shut down procedures
- Safety issues and warnings
- Operator's Preventative Maintenance Checks and Service (PMCS)

b. The maintainer training will contain the above operational procedures plus the following information:

Unit/DS/GS PMCS, Maintenance, and Troubleshooting Service Procedures

c. The DLP shall be formatted and delivered in accordance with DI-ILSS-81526 and ELIN A018, Instructional Media Package/Distance Learning Package

(C.6.2.4.8 CHANGED BY MODIFICATION P00001)

C.6.2.4.8 Training Analysis

The contractor shall develop and deliver a training analysis in the contractor's format in accordance with ELIN A004.

(C.6.3 CHANGED BY MODIFICATION P00001)

C.6.3 Diagnostics

The contractor shall submit documentation to the government showing the complete fault isolation capabilities of the analog diagnostic system. For the purpose of maintaining and troubleshooting via OEM Diagnostic Connector Assembly in accordance with Purchase Description paragraph 3.15.7, the contractor shall provide the manufacturer's recommended minimum and maximum parameters for all monitored components and how to interpret data outside the parameters. The contractor shall deliver the data in accordance with ELIN A014.

C.7 Warranty Transportation.

The contract requires the contractor to repair equipment that exhibit defects that are covered by the warranty provisions (clause H.2). To implement this warranty, the contractor shall visit various fielding sites to perform warranty work. The warranty work will be performed at no cost to the government. The travel costs to and from the fielding sites or transportation of the vehicle to and from the dealer are not included in the warranty. Travel costs will be provided for on CLIN 0132AA.

C.8 Transportability Report

The contractor shall submit a Transportability Report that includes the information requested on DI-PACK 8088B in accordance with ELIN A010.

C.9 Safety Engineering And Health Hazards

C.9.1 Safety Engineering Principles.

The contractor shall address the Safety and Health requirements of the PD in technical reviews. The contractor shall follow good safety

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engineering practices in establishing the ASWDS designs and operational procedures, to include modifications to your commercial components. The contractor can use MIL-STD-882D as a guide in determining whether safety engineering objectives are met. As a minimum, the contractor shall do the following:

- a. Identify hazards associated with the system by conducting safety analyses and hazard evaluations. Analyses shall include operational, maintenance, and transport aspects of the ASWDS.
- b. Eliminate or reduce significant hazards by appropriate design or material selection. If hazards to personnel cannot be avoided or eliminated, take steps to control or minimize those hazards.
- c. Locate equipment components and controls so that access to them by personnel during operation, maintenance or adjustments shall not require exposure to hazards. Examples of hazards to be considered include: high temperature, chemical burns, electrical shock, cutting edges, sharp points, or concentrations of toxic fumes above established threshold limit values. All moving parts, mechanical power transmission devices, exhaust system components, pneumatic components and hydraulic components which are of such a nature or so located as to be a hazard to operating or maintenance personnel shall either be enclosed or guarded. Protective devices shall not impair operational functions.
- d. Assure that suitable warning and caution notes are included in instructions for operation, maintenance, assembly and repairs and that distinct markings are placed on hazardous components of equipment.
- e. Assure the system meets all Federal Motor Vehicle Safety Standards (FMVSS) and Federal Motor Carrier Safety Regulations (FMCSR) that apply to a vehicle of this type.

C.9.2 Safety Assessment Report (SAR).

The contractor shall provide a safety and health hazard assessment based on independent testing. The safety (and health hazard) assessment shall identify all safety features of the hardware, system design and inherent hazards and shall establish special procedures and/or precautions to be observed by our test agencies and system users. The contractor shall prepare the SAR in accordance with DI-SAFT-80102B. The contractor shall identify Health Hazards associated with the system and incorporate them into the SAR. A health hazard is defined in DI-SAFT-80102B. MIL-STD-882D provides guidance in the preparation of the Safety Assessment and Health Hazard Assessment. In preparing the health hazard portion of the SAR, the contractor shall provide a description and discussion of each potential or actual health hazard issue of concern for each subsystem or component. The contractor shall include classification of severity and probability of occurrence, and when the hazards may be expected under normal or unusual operating or maintenance conditions. Include in the SAR copies of Material Safety Data Sheets (MSDS) for all hazardous materials incorporated into the system. The final SAR shall be delivered in accordance with ELIN A011. Examples of hazards to be included in the report are:

- a. Sharp edges/moving parts
- b. Noise. Identify any hearing protection required. Identify the 85 dB (A) noise profile around the vehicle.
- c. Electrical issues.
- d. Whole body vibration. Provide test data or perform equivalent testing conforming to the guidelines and measuring procedures set forth in ISO2631/1, dated 01 May 1997, or SAE J1013, dated 01 Jan 1992.
- e. Toxic fumes and Hazardous materials, to include those formed by the introduction of the system, or by the manufacture, test, maintenance or operation of the system.
- f. Chemical hazards. (e.g., flammables, corrosives, carcinogens or suspected carcinogens, systemic poisons, asphyxiants, including oxygen deficiencies, respiratory irritants, etc.).
- g. Physical hazards. (e.g., acoustical energy, heat or cold stress, ionizing and non-ionizing radiation).
- h. Biological hazards. (e.g., bacteria, fungi, etc.).
- i. Ergonomic hazards. (e.g., lifting requirements, task saturation, etc.).
- j. Hazardous Material Data.

C.9.2.1. The assessment shall address:

- a. System, facility and personnel protective equipment design requirements (e.g., ventilation, noise attenuation, radiation barriers, etc.) to allow safe operation and maintenance. When feasible engineering designs are not available to reduce hazards to acceptable levels, alternative protective and measures must be specified (e.g., protective clothing, specific operation or maintenance practices to reduce risk to an acceptable level).

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b. Potential non-or less hazardous material substitutions and projected handling and disposal issues. The HHA will discuss the rationale for using a hazardous material and long term effects (such as potential for personnel and environmental exposure, handling and disposal issues/requirements, protection/control measures, and life cycle costs) over a non-or less hazardous material. The effects and costs should be considered over the life of the systems, including the cost of handling and disposal. Identify potential non-or less hazardous alternatives if they exist and provide a justification why an alternative cannot be used.

c. Hazardous material data. The HHA shall describe the means for identifying and tracking information for each hazardous material.

- d. The HHA part of the assessment shall:
1. Identify the hazardous materials by name(s); the affected system components and processes; the quantity, characteristics, and concentrations of the materials in the system; and source documents relating to the materials.
 2. Determine under which conditions the hazardous materials can release or emit materials in a form that may be inhaled, ingested, absorbed by living organisms, or leached into the environment and if the materials pose a health threat.
 3. Characterize material hazards and determine reference quantities and hazard ratings. Acute health, chronic health, carcinogenic, contact, flammability, reactivity, and environmental hazards will be examined.
 4. Estimate the expected usage rate of each hazardous material for each process or component for the subsystem, total system, and program-wide impact.
 5. Recommend the disposition of each hazardous material identified. If for any scale of operation the reference quantity is exceeded by the estimated usage rate, material substitution or altered processes shall be considered to reduce risks associated with the material hazards while evaluating the impact on program costs.

e. In the event the system is modified or procedural changes made after the final SAR is submitted, you shall update the SAR to reflect those modifications or changes.

C.10 Contractor Technical Assistance

The contractor shall provide up to 25 CONUS and 10 OCONUS man-days of service, in whole or incrementally, as set forth herein. These man-days may be in support of unforeseen events that require support that is not included in any other portion of this contract. The Contracting Officer shall designate the times and locations of the service to be performed, but will not supervise or otherwise direct activities. The Contracting officer or his authorized representative shall notify the contractor at least 10 days in advance of CONUS travel and 20 days in advance of OCONUS travel of the date representative(s) are required. Instructions and established itineraries will be provided as necessary.

- a. Field Service Representative (FSR). The contractor shall provide FSRs who are thoroughly experienced and qualified to advise and make recommendations to orient and instruct key government personnel with respect to operation, maintenance, and repair of the ASWDS and their components.
- b. FSR Personal Data. The contractor shall make available personal data related to the FSRs including documentary evidence such as birth certification and such evidence as is requested by the government installation or area in which services are to be preformed. The contractor shall request approval for each FSR and include a statement of qualification for each representative. Government approval shall be limited to granting or denying security clearance for the person(s) named. The contractor shall contact local personnel and comply with local procedures.

c. Man-Days. The contractor shall provide man-days of service to locations in both CONUS and OCONUS. The government reserves the right to change the number of days of services to be furnished to the extent necessary to conform to our requirements and shall be obligated to pay for only actual services used. Each change in quantity shall be at the Man-day rate established.

- (1) The Man-day rate does not include travel costs (airfare, local car rental, lodging, meals, and incidental expenses) of the FSR while performing the services. The travel costs will be negotiated prior to the issuance of the delivery order.
- (2) A Man-Day is 8 hours. The representative is to work no more than 8 hours per day, 40 hours per week. A Man-day of service includes any period during which the representative is delayed or prevented from performing any task only if the delay or non-performance is solely the government's fault. Man-Day(s) of service includes travel time for initial travel from contractor's facility to site of work, for travel between sites of work, and to contractor's facility. It also includes any time that the FSR is preparing required reports.
- (3) Saturday/Sunday. When work is not performed on a Saturday/Sunday, and the representative is on site, a man-day shall be charged at the Saturday/Sunday man-day per diem rate only.

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(4) Holidays. The government will pay for federal U.S. holidays in addition to the actual days worked at the man-day rate established. The government is not responsible for vacation and other holidays and sick leave pay.

(5) Emergency Leave. The government is not responsible for any emergency leave that the contractor may grant to the FSR. The government is responsible for actual days worked by any qualified contractor representative. It is immaterial whether the same representative completes the assignment. The negotiated price for travel costs will include only one complete round-trip transportation and travel costs between sites of work per assignment.

d. Contract Field Service Report/Field Service Representative (FSR) Reports (DI-MGMT-81238(T) - ELIN A012). The contractor shall deliver the report in accordance with the ELIN A012.

C.11 Configuration Change Report

For contractor initiated configuration changes, the contractor shall notify the government of the following: old part number, new part number, vendor CAGE code, and Additional Reference Number (vendor part number). The contractor shall submit the report with two sections, one for form/fit/function changes and one for non-form/fit/function changes. If the contractor has not made any changes within the reporting period, the report shall make a statement to that effect. The report shall be submitted in accordance with ELIN A019.

C.12 Storage of Production Vehicles

a. The government reserves the right to require the contractor to store and maintain vehicles that the government has shipped in place. ("Shipped in place" means vehicles that the government has inspected, accepted, and remain at the contractor's facility.) This storage requirement applies for 180 days after acceptance of the first production vehicles.

b. The contractor shall receive a one-time payment for each vehicle that is placed in storage. This payment includes a fixed amount for taking the vehicle to the storage location, placing it in storage, and any re-inspection required. It also includes a monthly storage fee. The government will pro-rate the monthly storage fee for the vehicles stored for any period less than a full month on a daily basis.

c. The contractor shall maintain the vehicles in accordance with its standard commercial procedures to preclude deterioration of the vehicles and all of their components. The contractor shall submit the procedures for storage to the PCO no later than 180 DAC and maintain a log for all vehicles placed in storage. The log shall include: the vehicle serial number, the date it was placed in storage, the dates maintenance and exercise are performed, deficiencies detected during the post-storage examination, and the date vehicle is removed from storage. The contractor shall make the log available to the government upon request.

d. The government reserves the right to re-examine the stored vehicles prior to shipment in accordance with paragraph 4.4.1 of the PD and the contractor shall perform the run-in tests in accordance with paragraph 4.5.2.1 of the PD. The government will also perform a visual examination of the vehicles for deterioration, damaged parts, and evidence of mechanical problems. The contractor shall correct all deficiencies detected during the re-examination at its own expense. The provision of the contract entitled "Government Property - Fixed Price" shall apply to this and all government property while in possession of the contractor.

e. The contractor shall remove the vehicles from storage and ship them in the same chronological order that they were placed in storage (i.e. first in, first out).

f. If the contractor must store vehicles because of its failure to provide timely and accurate logistic data and LMI requirements, or for any other reason that is not the government's fault, the contractor shall store the vehicles at no cost to the government. See the provision entitles "Essentiality of Timely Delivery of Data," H.1.

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Name of Offeror or Contractor: CATERPILLAR INC.			

SECTION J - LIST OF ATTACHMENTS

List of Addenda	Title	Date	Number of Pages	Transmitted By
Exhibit A	CDRLS A001-A019		019	EMAIL

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ATT/EXH ID Exhibit A
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CONTRACT DATA REQUIREMENTS (CDRLS) A001, A004, A005, A006, A007, A008, A009, A010, A012, A013, A014, A015, A016 AND A017 ARE INCLUDED WITH MODIFICATION P00001 TO REFLECT VARIOUS CHANGES AS OUTLINED IN THE MODIFICATION. TRANSMITTAL OF NEW CDRLS IS BY EMAIL.